



**Attachment A
Amendment B**

Appn. Number: 10/692202
Appn. Filed: 2003 Oct 23
Applicant: C. (Charles) David Rogers
Title: System and Apparatus for Automatic and Continuous Monitoring, Proactive Waming and Control of One or More Independently Operated Marine Vessels

Examiner/GAU: Gertrude Arthur/3661

Abbreviated Description of the First Application of the Navigation Assistance System

Notably, the primary objective of the Navigation Assistance System invention is to prevent recreational and small commercial vessel accidents that result in fatalities and serious injuries to vessel occupants.

(1999 – 2003 Accident avg. 6,500 Fatalities: 710 Serious Injuries: 4150)

The methodologies of the invention are specifically designed to warn-for 62% of the causes associated with serious accidents in the recreational and small commercial boating sector.

This is accomplished by means of an independent, seamless and scalable system that automatically provides optimized proactive warnings for future threats caused by the environment that occur independent of the vessel operating system. This navigation system is designed to coexist as a system platform in a hierarchy above that of the vessel and provides advisory warnings and courses (float plans) aimed to remove the vessel from on-coming threats. Further, the system overcomes current delays in emergency communication and prevents nuisance and hoax emergency calls by providing direct, encrypted and identified communication from an operator keypad to the necessary emergency response services.

A yet further enhancement of the navigation system of the invention is to provide mission support for the Department of Navy's Marine Vessel Traffic System – US Patent No. 6,249,241 B1 and the Department of Homeland Security – US Coast Guard and US Border Patrol coastline and inland waters emergency response and surveillance, respectively.

The demonstration prototype system will be tested in the Potomac region on Chesapeake Bay in late 2006. The shore-based fail-safe server will be installed at a local Towing Service facility headquartered in Alexandria, VA. Five Special purpose units will be provided to one on a towboat and four on recreational vessels. Simulation data will include severe storms, underwater hazards, collision, on-board fire, man-overboard, terrorist security violation, fog, and many others. Both private boating organizations and Government Agencies will be invited to demonstrations of the system. The system is initially designed for application in the Private Sector boating-consumer market.